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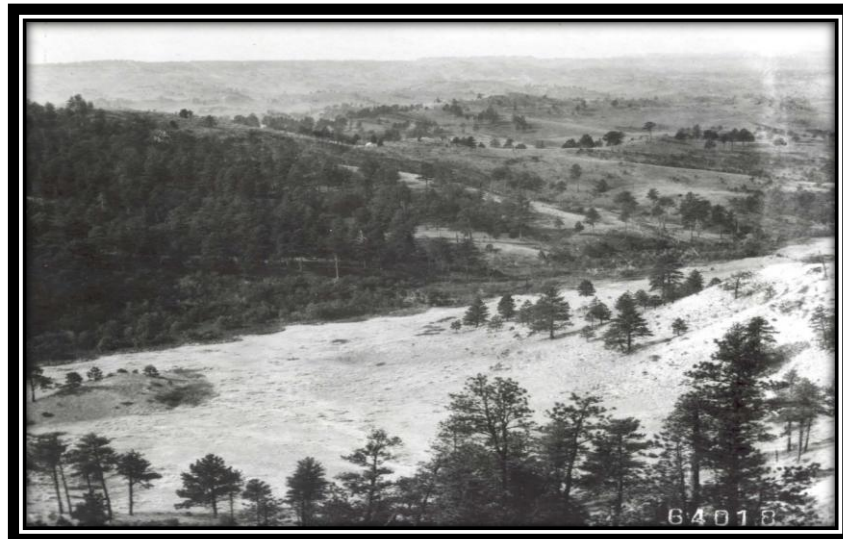


FINAL ENVIRONMENTAL IMPACT STATEMENT

BEAVER CREEK LANDSCAPE MANAGEMENT PROJECT

Ashland Ranger District, Custer National Forest
Powder River County, Montana

Township 1 South, Range 46 East; Township 1 South, Range 47 East;
Township 2 South, Range 46; and Township 2 South, Range 47 East.



1905: Photo looking NW towards Beaver-Creek – Otter Creek Divide.



1994: Looking NW towards Beaver-Creek – Otter Creek Divide.

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Beaver Creek Landscape Management Project Final Environmental Impact Statement

Powder River County, Montana

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Abstract: The Beaver Creek Landscape Management Project (BCLMP) area was selected for treatment in response to the identification of this area as a high-risk, priority area in the 2004 Powder River County Wildfire Protection Plan. Forest Vegetation treatments are needed to change landscape vegetation characteristics so as to better enable fire fighters to suppress and contain wildfires with undesirable fire effects and to increase the ability of portions of the BCLMP area to withstand high frequency low severity wildfires. In addition, there is a need to diversify stand structure in the BCLMP area, and to promote early development, open and closed mid development, and late development open stand structure that promote disturbance regimes and processes more consistent with a fire adapted ecosystem. The purpose of the BCLMP is to:

- 1) Reduce fuel loading (surface, ladder, and canopy fuels) on the landscape to promote lower intensity / severity fires as opposed to stand replacement fires, and
- 2) Promote a healthy, structurally diverse, productive, and vigorous growing ponderosa pine ecosystem that is resilient and sustainable.

This Final Environmental Impact Statement (FEIS) considers a Proposed Action alternative (A), two additional Action alternatives (B and C), and a No Action alternative (D). Alternative A (Proposed Action) and B (Preferred Alternative) would treat approximately 10,508 acres, and Alternative C would treat approximately 8,059 acres using a variety of tools, including tractor and/or cable timber harvest, noncommercial mastication, hand thinning, and prescribed fire to meet the purpose and need. Under the Action alternatives, approximately 22,495 ccf, 21,803 ccf, and 9,255 ccf could be sold under contract for Alternatives A, B, and C respectively.

Alternatives A, B, and C would require varying amounts of road maintenance and reconstruction activities to complete ground based commercial timber harvest, and require approximately 18.2, 15.2, and 5.7 miles of temporary roads respectively. Alternatives A, B, and C would also obliterate approximately 2.0 miles of existing roads to improve overall watershed health in the project area.

Comment/Appeal: Public review and comment was solicited on the Draft Environmental Impact Statement (EIS), and utilized in the preparation of the Final EIS. No further public review or comment is being sought on the FEIS. Reviewers whom disagree with information presented in this FEIS may appeal any decision that is based upon it in accordance with 36 CFR 215. The decision is outlined in the Beaver Creek Landscape Management Project Record of Decision.

SUMMARY

The Beaver Creek Landscape Management Project (BCLMP) includes 14,053 acres on the Ashland Ranger District, Custer National Forest (CNF) in the Beaver Creek and East Fork Otter Creek drainages. The project area is located approximately 17 miles east of Ashland, Montana and north of Hwy 212 in Powder River County, Montana.

The BCLMP area is dominated by Ponderosa pine (*Pinus Ponderosa*). Historically, frequent low intensity fires burned ponderosa pine stands in the Ashland District, clearing brush and grass but leaving trees alive and healthy. By excluding fire from the natural cycle through decades of fire suppression, extended drought and other changes, tree densities and flammable vegetation has increased across large areas of the forest landscape, resulting in the development of multi-storied, dense, full-canopied ponderosa pine stands, greater tree densities and a buildup of down woody material and ladder fuels across large areas of the forest landscape. The buildup of vegetation provides “ladders” for wildfire to climb into the treetops. In areas where trees are densely packed, the fires can spread rapidly from tree-to-tree in a phenomenon known as “crowning.” Over the past 15 years, roughly two-fifths of the Ashland RD has experienced stand-replacing wildfire. These large wildfires have removed broad landscapes of Ponderosa pine forests along with public and private infrastructure.

Following the 2000 fire season, Congress directed the Forest Service to identify high-risk wildland/urban interface areas. In 2002, Powder River County, the Broadus Volunteer Fire Department, State and Federal Agencies began working together to identify wildland fire risks, and identify areas in need of vegetative management activities to reduce undesirable fire effects. This collaborative effort resulted in the 2004 Powder River County Wildfire Protection Plan (PRCWPP), which identifies the northeastern portion of the Ashland Ranger District (including the BCLMP area), as the highest priority for fuels reduction in Powder River County.

The existing condition in the Beaver Creek area, which has missed several natural fire intervals, can be treated in accordance with the Custer Forest Plan (forest-wide and management area direction) to create a spatial distribution of forest development classes and stand structure that reduces the prevalence of surface, ladder and canopy fuel loads, reintroduces prescribed fire to portions of the landscape, and results in landscape that is more resilient to wildfires. The purposes of the BCLMP are to:

- 1) Reduce fuel loading (surface, ladder, and canopy fuels) on the landscape to promote lower intensity / severity fires as opposed to stand replacement fires, and
- 2) Promote a healthy, structurally diverse, productive, and vigorous growing ponderosa pine ecosystem that is resilient and sustainable.

Forest Vegetation treatments are needed to change landscape vegetation characteristics to address potentially hazardous fuel conditions identified as high-risk areas by Powder River County in the PRCWPP; this will enable fire fighters to suppress and contain wildfires with undesirable fire effects and to increase the ability of portions of the BCLMP area to withstand high frequency low severity wildfires.

A team of interdisciplinary specialists considered the use of prescribed fire, thinning, no treatment, and commercial and noncommercial forest vegetation treatments to address the project purpose and need. Treatments were proposed based on a multitude of factors, including topography, tree crown densities, access, ladder fuel components, wildlife habitat needs, past management activities, and public comment. All of the proposed treatments would reduce ladder fuels, tree densities, crown cover, and maintain surface fuels at levels that will create a diversity of stand conditions in the BCLMP area.

This Final Environmental Impact Statement (FEIS) analyzes and discloses the effects of the Forest Service Proposed Action alternative (A), two additional Action alternatives (B and C), and a No Action alternative (D). The Forest Service preferred alternative is Alternative B.

Alternative A (Proposed Action) and B (Preferred Alternative) would treat approximately 10,508 acres, and Alternative C would treat approximately 8,059 acres using a variety of tools, including tractor and/or cable timber harvest, noncommercial mastication, hand thinning, and prescribed fire to meet the purpose and need. All of the action alternatives incorporate similar treatments, and vary primarily by acres treated. Alternative A proposes the maximum amount of commercial treatment, and C the least. Under the Action alternatives, approximately 22,495 hundred cubic feet (ccf), 21,803 ccf, and 9,255 ccf could be sold under contract for Alternatives A, B, and C respectively. In the event that a commercial timber product is not marketable, use of mechanical treatments and prescribed fire would proceed where appropriate and as allocated funding allows.

Alternative A (Proposed Action) includes treatments that were previously proposed in the East Otter Environmental Assessment and Whitetail Environmental Assessment. Alternative B (Preferred Alternative) was developed to address the issue of potential impacts to big game habitat and was responsive to public comment that the road cost of constructing approximately 20 miles of temporary road was too high. Alternative B treats the same acreage as Alternative A, but converts 208 acres of commercial treatment to noncommercial, and eliminates three miles of temporary roads compared to Alternative A. Alternative C was developed to address the issue of potential impacts to the northern goshawk, a Management Indicator Species (MIS) for mature and old growth forest. Alternative C treats about 2,500 acres less than A or B, and eliminates 12.5 miles of temporary road compared to Alternative A. Alternatives B and C would place a permanent seasonal motorized road closure on two trails to improve big game security (September 1 – December 1).

Temporary road construction, road maintenance, and road reconstruction are needed to conduct proposed management activities in each of the Action alternatives. Alternative A would require approximately 18.2 miles of temporary road construction, 16.6 miles of existing road maintenance, and 12.8 miles of existing road reconstruction and maintenance. Alternative B would require approximately 15.2 miles of temporary road construction, 14.2 miles of existing road maintenance, and 12.8 miles of existing road reconstruction and maintenance. Alternative C would require approximately 5.7 miles of temporary road construction, 8.0 miles of existing road maintenance, and 8.9 miles of existing road reconstruction and maintenance. Alternatives B and C also include permanent seasonal motorized restrictions on Forest Service Routes 41338

and 44094 to improve big game security during the hunting season (September 1 – December 1). Alternatives A, B, and C would also obliterate approximately 2.0 miles of existing roads to improve overall watershed health in the project area.

The harvesting of timber, thinning, prescribed burning, and construction and reconstruction of roads would be conducted in accordance with applicable standards and guidelines identified in the Forest Plan, Best Management Practices, as well as, other requirements of pertinent Federal and State laws and regulations. These may include, but are not limited to, the National Forest Management Act, Endangered Species Act, Clean Water Act, National Historic Preservation Act, and State Water Quality Standards.

The BCLMP includes treatments previously proposed as the Whitetail Hazardous Fuels Reduction Project, and East Otter Hazardous Fuels project. The Whitetail project was initially proposed in 2007 and the East Otter project in 2008. Since that time, the Forest Service has refined these treatment proposals in response to public comment and collaboration and to better address multiple landscape objectives. Major conclusions of the FEIS include:

- When compared to the No Action alternative, Alternatives A and B would decrease tree densities, reduce competition, increase understory diversity, and promote healthy, vigorous trees and overall forest health on about 75 percent of the 14,053 project area.
- With the No Action alternative, approximately 75% of the analysis area would remain susceptible to potential stand replacement fire. Forested areas would retain a high departure from historic (reference) conditions in terms of fire regime condition class (FRCC).
- Under Alternatives A and B, approximately 36% of the analysis area would remain susceptible to potential stand replacement fire after alternative implementation. Forested areas would be changed to move the landscape towards a natural range of departure from reference conditions.
- Implementation of Alternatives A or B complies with Forest Plan direction to encourage management activities that maintain or enhance a variety of successional vegetative stages across 75% of the project area.
- Under Alternative C, approximately 43% of the analysis area would remain susceptible to potential stand replacement fire after alternative implementation. Forested areas in treated units would be changed to move the landscape towards a natural range of departure from reference conditions. Land within the boundaries of the goshawk PFA's would remain untreated and at a higher risk of catastrophic fire compared to Alternatives A and B.
- Implementation of Alternative C also complies with the Forest Plan amendment, but would not be as effective at maintaining or enhancing a variety of successional vegetative stages across the landscape compared to Alternatives A and B because it treats less acreage.

Based upon the purpose and need for the proposed action and the effects of the alternatives, the responsible official will decide whether to proceed with the action as proposed, as modified by another alternative or not at all.

CHANGES FROM DRAFT TO FINAL EIS

Chapter 1: The Purpose and Need was refined to better explain why the BCLMP is proposed. A section was added describing issues that were raised during public comment on the DEIS that led to the development of two new alternatives.

Chapter 2: Two Action alternatives were added for consideration (B and C). The Proposed Action was identified as Alternative A, and No Action as Alternative D. A section on consistency with the Forest Plan was moved from Chapter 2 and greatly expanded. A cumulative effects table was added.

Chapter 3: The vegetation section (3.1) was reorganized and additional information was added. The fuels section (3.2) was essentially re-written between DEIS and FEIS. An air quality section was added (3.13). Other sections were edited, and additional information was added to better describe the affected environment and effects of all Action and No Action alternatives.

DOCUMENT STRUCTURE

The Forest Service has prepared this FEIS in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This FEIS discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and three alternatives, including no action. The document is organized into four chapters:

Chapter 1. Purpose and Need for Action: The chapter describes the history of the project proposal, the purpose of and need for the project, and summarizes the proposed action. This section also describes public involvement, and how public comment was used to develop the key issues driving alternatives and other issues that are analyzed in the effects analysis.

Chapter 2. Alternatives: This chapter provides a more detailed description of the agency's proposed action and three alternatives. This chapter also describes mitigation measures and monitoring efforts. Finally, Chapter 2 includes a summary table of the environmental consequences associated with each alternative as they relate to key issues.

Chapter 3. Affected Environment and Environmental Consequences: This chapter describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized into sections by resource area.

Chapter 4. Response to Comments: This chapter summarizes responses to comments that were received on the DEIS.

Chapter 5. Consultation and Coordination: This chapter provides a list of preparers and agencies consulted during the development of the environmental impact statement.

Appendices: Additional maps, treatment descriptions and documents.

Glossary. The glossary defines terms used in the FEIS.

Index: The index provides page numbers by document topic.

References: Sources used during the preparation of this document.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record (Project Record) located at the Ashland Ranger District (Ashland RD) in Ashland, Montana. The project planning record is available for public review upon request.

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[Ch1.docx](#)
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[Ch3.docx](#)
[Sec3.1-Veg.docx](#)
[Sec3.2-Fuels.docx](#)
[Sec3.3-Soils.docx](#)
[Sec3.4-Water Resources.docx](#)
[Sec3.5-Economics.docx](#)
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